

Roll No.

Total Pages : 03

GSM/M-21

1629

ZOOLOGY

Paper I

Life and Diversity of Chordates-II

Time : Three Hours]

[Maximum Marks : 40

Note : Attempt *Five* questions in all. Q. No. **1** is compulsory.

Attempt *two* questions each from Section A and Section B. Support your answer with neat and labelled diagram(s) wherever necessary.

1. Explain the following terms in about **20** words each :

- (a) Bidder's canal
- (b) Down feathers
- (c) Diastema
- (d) Pterosaurs
- (e) Furcula
- (f) Spiral valve
- (g) Hemipenes
- (h) Arbor vitae
- (i) Metachrosis
- (j) Migration.

1×10=10

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Section A

2. Write notes on the following :
 - (a) Laryngo-tracheal chamber of Frog 3
 - (b) Parental care in amphibians. 4½
3. (a) Draw well labelled diagram of V.S. Eye of Hemidactylus. 4½
- (b) Enlist the differences between poisonous and non-poisonous snakes. 3
4. (a) Describe evolutionary tree of amphibians. 3
- (b) Explain pulmonary respiration in Frog. 4½
5. Describe the internal structure of heart of Hemidactylus. 7½

Section B

6. Explain the digestive system of Pigeon. 7½
7. Write short notes on the following :
 - (a) Air sacs in Pigeon 3½
 - (b) Morphological Adaptations for flight in Birds. 4

8. (a) Describe Adaptive Radiations in Eutherians. $3\frac{1}{2}$
(b) Draw well labelled diagram of Female Reproductive System of Rat. 4
9. Classify the class Mammalia upto Order level giving the characters and examples of each group. $7\frac{1}{2}$